

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

MAY 10 1918

EXPERIMENT STATION FILE

A. I. 31.

Issued March 14, 1918.

U. S. DEPARTMENT OF AGRICULTURE,

BUREAU OF ANIMAL INDUSTRY,

DAIRY DIVISION.

SKIM MILK FOR HUMAN FOOD.

All skim milk should be used—none wasted. In this food emergency skim milk should be made to furnish the maximum of human food. It does this best when used direct or as cottage cheese, prepared buttermilk, or other by-product. Skim milk is used economically in feeding hogs for pork production, yet 100 pounds of skim milk will produce 15 pounds of cottage cheese as compared with only 4.8 of dressed pork when fed with corn.

Skim milk when made into cottage cheese furnishes nearly seven times as much protein and nearly as much energy as the pork that it will produce when fed with corn. In addition, when cottage cheese is made from skim milk, about 85 per cent of the latter remains as whey, which has about half the value of skim milk for hog feeding. When cottage cheese is made and the whey used for hog feeding, a still greater increase of nutrients is returned for human food. So far as possible, therefore, skim milk should be used for human food, and only the excess fed to live stock.

A leading authority on hog feeding says: "To find the value of 100 pounds of skim milk when fed alone, multiply the market price of live hogs in cents per pound by 5; if fed in combination with corn or barley multiply by 6." Thus, when hogs bring 10 cents a pound, skim milk is worth 50 cents a hundredweight when fed alone, or 60 cents when fed with corn or other grain.

According to another authority, "the value of 100 pounds of skim milk, when fed along with corn for fattening hogs, is half the market price of corn per bushel." That is, when corn costs \$1 a bushel, skim milk is worth 50 cents a hundredweight.

Buttermilk is equal to skim milk for feeding hogs, while whey is half as valuable. Whey, being low in protein, is not well suited for young pigs and should be fed to older animals.

Ordinary grass pasture, or green rye, oats, sorghum, rape, clover, alfalfa, peas, or beans can take the place of skim milk after the little pigs get a start. Much green feed can be raised without greatly reducing the acreage of other crops.

Calves and pigs do well when some skim milk is fed, but they need it only for a short time and in limited quantities. Except when fed to very young animals, skim milk is fed most economically when supplemented with grain. For dairy calves skim milk may be substituted in part for whole milk on the tenth day. If the calves are vigorous they should receive a little grain and hay at two weeks of age, and it is safe to discontinue the skim milk five or six weeks later.

By substituting grain, green feed, buttermilk, and whey for skim milk in animal feeding, much skim milk may be released for use in cooking, for condensing, or for making cottage cheese. Let us, therefore, use all the skim milk possible for human food and feed only the surplus to live stock.